

**UTAH GEOLOGICAL SURVEY
BOARD MEETING MINUTES
April 11, 2008
8:30 A.M. – 12:00 P.M.**

Attendance:

Board Members:

Geoffrey Bedell, Chair
Stephen Church
Kenneth Puchlik
Alisa Schofield

Jack Hamilton, Vice Chair
David Simon
Mark Bunnell
Tom Faddies, Ex Officio

Staff:

Rick Allis, Director
John Kingsley, Associate Director
Jason Berry, Program Manager
Steve Bowman, Program Manager
Evan Curtis, Gov. Office Visitor

Kimm Harty, Deputy Director
Dianne Davis, Board Secretary
Bob Biek, Mapping Program
Will Chatwin, State Energy Program

Chair Bedell welcomed all to the meeting of April 11, 2008. The meeting began at 8:32 A.M.

APPROVAL OF MINUTES

Chair Bedell asked for a motion to approve the last meeting's minutes. There was a typo in the minutes in the last section. The word "motional" should be "motion". Mark Bunnell motioned to approve minutes as written with the change, and Ken Puchlik made a second. All were in favor.

DIRECTOR'S REPORT

FINANCIAL POSITION

The financial information shows the UGS to be close to its operating budget. Our expectation based on adjusted expenditure and revenue trends is that the UGS should finish the fiscal year with a carry forward, excluding additional West Desert drilling funds, of between \$500k and \$700k. We started the year with a carry forward of \$726k. The operating budget compiled in September had the carry forward being reduced to between \$200k - \$300k. The main change is mineral lease revenue being higher than expected, and costs related to modification of the Utah Core Research Center not being incurred until FY09. With relatively high natural gas prices since December, we expect the total Mineral Lease revenue to end the fiscal year between \$2.5 and \$2.6 million.

The UGS now also receives funds from the Exchanged Lands account managed by SITLA. For the next two years there are two components: 1.66% of the account, which replaces exchanged lands funds originally included in Mineral Lease payments to the UGS; and 7.5% of the account, which was earmarked by legislature for west desert ground water investigations for the period 3/2007 – 6/2009. For the period up to the end of this fiscal year, SITLA have advised that the UGS should receive \$400k and \$1.7 million respectively for these two components. After three of five quarters in this period, the UGS has received a total of only \$0.59 million. Apparently bonus bid funds will

boost the remaining two quarters of revenue. With little experience in receiving these funds, we have a poor understanding of the future revenue trend, and are cautious about accepting SITLA's projection.

The UGS is able to carry forward up to \$3.5 million in all sources of funds at the end of FY08 (intent language for UGS in this legislative session; details discussed below). Most of the Exchanged Lands funds will have to be carried forward because of insufficient time between formally receiving the funds (end of legislative session) and the end of the fiscal year.

The large scale of the West Desert drilling program will complicate the UGS budget until the end of FY10. A full update on progress of this project will be given at the June Board meeting. A very brief financial summary is that \$1.2 million was spent on the project in the first half of FY08 (8 monitoring sites completed), and \$0.69 million should be spent by the end of the FY (additional 6 sites to be completed). In FY09, a further \$1.7 million is planned to be drilled on 13 additional sites. FY10 will wrap-up the project with \$0.5 million on a final 11 sites. Some sites will be shallow wells near wetlands, and some monitoring will involve critical spring flows. The total of \$3.5 million expenditure is funded by \$1.5 million from General Funds (FY08 one-time appropriation) and \$2.0 million from the Exchanged Lands Funds. The exact amounts from future Exchanged Lands Funds are not known, and the number of monitoring sites completed is also an estimate.

We can have this large of a carry-forward due to the drilling costs. This is monitored very carefully. Snake Valley should show that there is water and good permeability there.

GRANTS & CONTRACTS

Notable successes since the last Board meeting are the Research Partnership for the Security of Energy in America (RPSEA) award for a shale-gas assessment in the Paradox Basin (\$650k over three years; Tom Chidsey PI, partnering with Halliburton), and a new STATEMAP award (\$228k, Grant Willis PI).

Division of Water rights requested a proposal from the Ground-Water Section on Morgan Valley hydrogeology (\$339k, Mike Lowe, PI). A large proposal to DOE on environmental assistance to Utah's oil, gas, and oil shale industries is being prepared (Mike Vandenberg, PI, ~ \$800k over three years, + 20% cost share) and is due for submittal at the end of April. We will have a strong proposal.

Phase III of the Southwest Partnership for CO₂ sequestration has been awarded by DOE, but details are still being negotiated with DOE. The UGS component is nominally \$433k (Craig Morgan, PI) for the first year, but because it has not yet been finalized, no funds have been transferred, and it is looking like most of the work will not occur until our FY09. This project involves injecting CO₂ from the Navajo formation of Farnham Dome (near Price) into deeper formations nearby. About 10% of the CO₂ will come from gas separation plants at the coalbed methane fields near Price. This is taking some time to get everything into place.

Although we have been predicting a downturn in federal funding for several years due to belt-tightening in Washington, the funding outlook for FY09 looks as strong as it has ever been. This is mainly due to energy opportunities from DOE for which Utah is well-positioned to take advantage of.

PERSONNEL

Steven Bowman has been appointed as the new Program Manager for Geologic Hazards. Steve has a Ph.D. in Geological Engineering from the University of Nevada, Reno, and was working for Terracon in Reno prior to this appointment.

The Energy and Minerals Program has appointed Sonja Heuscher as a geologist with GIS skills to fill the slot left by Sharon Wakefield. Sonja has an MS in Geology from the University of Utah, and has worked for Oak Ridge Laboratory and for Utah's Department of Environmental Quality for the last year.

The Ground Water Section has appointed Sandow (Mark) Yidana to fill the ground-water modeling vacancy (Charlie Bishop's position). Mark has a Doctorate in Environmental Management from Montclair State University, New Jersey, his dissertation being on the hydrochemistry of water resources. His B.Sc. is from the University of Ghana, and he also completed graduate work at the Universities of Kiel and Bremen.

The Editorial section has appointed Stevie Emerson to fill the vacant Graphic Artist position. Stevie has a Bachelor of Fine Arts from Weber State University. She has previously worked on a free-lance basis, and this is her first full-time position as a graphic artist.

The Energy and Minerals Program hired Ammon McDonald as a Geotechnician to help with their grant-funded projects. He has a B.S. in geology from the University of Utah.

During March we said farewell to Gary Christenson (retirement), and Jennifer Cavin (resignation). Jennifer was offered a job as a paleo-preparator with the Nebraska Highway Salvage Program. Scott Madsen is in the process of accepting the offer to replace Jennifer. Scott has a BS in Geology, and 30 years work as a paleo-preparator and field paleontologist with the National Park Service (23 years, Dinosaur National Monument) and the Museum of Northern Arizona (7 years).

We also lost Phil Powlick (SEP Manager) in March. Phil is now the Director of the Public Utilities Division. Jason Berry has been hired for this position.

Many programs are organizing temporary help with summer projects. We expect about eight "intern" appointments for the summer months.

Advertising for the two new Hazard Geologists funded by the General Fund building block began in early April. Our preliminary objective is to get better maps.

Awards

The Utah Division of Water Quality Board presented Mike Lowe and Janae Wallace the 2008 Calvin K. Sudweeks Water Quality Award at their St. George meeting on April 2. This award is given each year to an individual or team that has shown outstanding leadership in the water quality field. The citation says, "Specifically, Mike and Janae have been responsible for the preparation and submittal of several 'Ground water aquifer classification' petitions, approved by the Water Quality Board, that will help identify and solve any ground-water problems throughout the state". Jack Hamilton motioned that the Board formerly congratulate Mike and Janae. Mark Bunnell seconded and the motion was unanimous.

In February, the UGS announced its “2008 Employee of the Year”. This year’s winner is Kent Brown. The selection is made based on nominations from staff, and a selection panel comprising most sectors of the staff.

Wetlands Coordinator

The Division of Wildlife Resources decided to relinquish the position of Wetlands Coordinator on the retirement of the incumbent. Mike Lowe assumes the wetlands coordinator role. The role will be reviewed after a couple of years, and if no funding occurs, we will relinquish it to another state agency. Rich Emerson has had some experience in this field and will be helping Mike.

LEGISLATIVE REVIEW

On the appropriations side, the UGS needed language to provide access to Exchanged Lands Funds that were defined in code (from HB134) as going to the UGS in the 2007 legislative session, but that were inadvertently omitted in the final Bill of Bills appropriations on the last day of the session. An estimated \$2.1 million will have accumulated in this account by June 30 this year, with 82% of this allocated to West Desert drilling, and the remainder to traditional UGS projects. The appropriations language has been corrected, so the UGS now has access to these funds. We were reluctant to spend these funds prior to formally receiving them, so most of the West Desert funds will be carried through to next FY.

As a consequence of the above, the UGS also needed intent language to ensure that we had flexibility to carry forward traditional mineral lease funds and these Exchanged Lands funds. The approved language provides for up to \$3.5 million to be carried forward to next fiscal year. In recent years the UGS has carried forward between \$300k and \$700k. Because of the additional funds designated for West Desert drilling, this year’s carry forward could be more than \$2 million. The exact amount is difficult to predict because we have revenue from two quarters still outstanding, and the Exchanged Lands revenue streams are even more difficult to predict than Mineral Lease revenue trends.

An important bill that received bipartisan support and passed easily through both the House and Senate was HB 177 sponsored by Representative Morley. This bill modifies state code by defining a flood plain or geologic hazard area, and specifies how a municipality may enact an ordinance regulating land use and development in such areas. The bill also specifies an appeal process on technical issues, if requested by the developer. This requires an independent, three-person, expert panel to be set up with one expert chosen by the developer, one expert by the municipality, and the third expert to be jointly chosen by those two experts. The costs of the panel are to be evenly split between the municipality and the developer.

CORE FACILITY UPDATE

Our original operating budget included \$300k for modifications to the Utah Core Research Center (UCRC). So far, only \$24k has been spent on architectural plans, and these have not yet been received. We were told by DFCM that materials were to be purchased, but it turns out the purchase did not occur. As a result of slow progress, the modifications are likely to be done in FY09.

DISCUSSION ITEMS

Revolving Loan Program

Energy Efficiency Loan Fund – The current application was denied because total project cost could not be recouped through the annual energy cost savings in less than 12 years. There are two primary challenges in evaluating the current application, the complexity of the project and the fact it is the first application in a brand new program. From a project complexity standpoint, the scale of the total project costs contribute to a lengthy payback. From a new program standpoint, the review committee was struggling with the same simple payback criteria.

The Board wondered that the criteria might be too stringent and that we may need to take a second look at how this is set up.

Ken Puchlik motioned that the Board accept to reject the proposal. Jack Hamilton seconded. The vote was unanimous.

AASG National Conference, Park City 2009

The UGS will host the 101st conference of the Association of American State Geologists in mid June, 2009. It was 1974 when the UGS previously hosted this event (Moab). It will provide an opportunity to showcase the spectacular geology of the state, and the balancing act that the state continually grapples with, such as resource use versus protection, and urban development versus hazards delineation. The Yarrow Hotel in Park City has already been reserved as the conference venue. Detailed planning has begun. A four-page color brochure advertising the conference will be prepared for the centenary AASG conference in DC in late June, and as State Geologist if the host Survey, Director Allis will give a 5 minute talk to promote attendance at the 101st conference in Park City. An additional, one-page sponsorship request page is also being prepared (draft version in Board packet). Total direct costs for the conference will be close to \$100,000, excluding accommodation costs that will be registrant's responsibility. Our business strategy is to split the direct costs between 75% registration and field trip fees and 25% sponsorship costs. The planning budget will include a 10% financial cushion to eliminate the risk of making a loss. In addition, the UGS will encourage an early commitment by sponsors so that fees for registration and field trips, and some discretionary costs can be reduced or eliminated if necessary. The UGS will donate the time required to organize and run the event.

A four-day field trip to Capital Reef, Bryce and Zion Parks will be offered immediately before the conference (Grant Willis leading), and a post-trip, three-day field trip to the Moab area will be led by Tom Chidsey. The mid-conference, half-day field trip will be in the Salt Lake Valley area, tentatively visiting the top of the Snowbird tram (Wasatch Mountain geology review), the Bingham Pit (Utah's copper history), and an overlook of the Great Salt Lake for a discussion of the multiple uses of the lake. The business sessions extend over three days.

Suggestions from the Board on any aspect of this event are welcome.

Board 2009 Field Trip

After discussion of possibilities, the Board agreed with the suggestion of Director Allis that the trip focus on geologic issues around southwest Utah. The work that UGS is doing on hazards in St. George, and at Zion National Park will be highlighted. The dates will be October 24th – 26th.

June Board Meeting

The next meeting will be Friday, June 6th at 8:30. After the formal meeting, we will go to the Bingham Pit. We will return to the UGS between 4:00 and 4:30.

ACTION ITEMS

Schedule B appointment for Tyler Knudsen in Cedar City

The UGS would like to make this position a schedule B position. Ken motioned to accept this proposal and Dave Simon seconded. The voting was unanimous.

Policy on UGS Reviews

The following brief statement of the issue, and a recommended policy was presented to the Board for discussion and recommendations. This arose from past Board recommendations on reviews and the implications of HB177.

POLICY STATEMENT – REVIEW OF SUBDIVISION REPORTS

The UGS does not have the resources to expand its role in reviewing subdivision reports for local governments, and encourages local governments to use qualified private-sector consultants to perform these reviews. In special circumstances and at the request of the local jurisdiction, the UGS will review reports in partnership with private-sector consultants and provide a minority member of a hazards review panel.

POLICY REGARDING REPORT REVIEWS FOR LOCAL GOVERNMENTS

The new UGS policy regarding reviews of geologic-hazard reports for subdivisions is to transfer the responsibility for these reviews to private consultants, but to continue UGS involvement under special circumstances. These special circumstances include: 1) reviewing follow-up reports that address previous UGS review comments; 2) serving on review panels either performing reviews or resolving disputes between consultants and other reviewers; 3) performing first-time reviews for small communities that cannot pay for outside reviews, with the understanding that reviews will only be performed for a short time until the community adopts policies to fund outside reviews; 4) limiting “third-party” reviews of private-consultant reviews when the local government believes a review is inadequate or incomplete; 5) no qualified private-sector reviewer is available; and 6) other circumstances as needs arise. The UGS will continue to perform and review reports for critical public facilities (schools, water tanks, etc.) upon request by State agencies and local governments.

The Board also reviewed a list of pros and cons concerning UGS reviews for local governments that Gary Christenson had prepared last year. After discussion, the Board clarified its policy as follows:

*The UGS will not perform geologic hazard reviews in normal circumstances.
The UGS encourages local governments to use private-sector consultants.
The UGS may assist local governments with reviews under special circumstances as specified above. In addition, the UGS may make staff available for statutory review panels.*

Ken Puchlik motioned to adopt the language that was just verbalized. Jack Hamilton seconded the motion. All were in favor. The motion carried.

Ken Puchlik motioned that the above amendment be added as of July 1st. Jack Hamilton seconded and the motion carried unanimously.

ADJOURNMENT

Alisa Schofield motioned to adjourn the meeting at 12:00 p.m. Mark Bunnell seconded the motion. All were in favor.